IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A system, comprising:

a local area network management system to manage and configure a network of routers;

a wide area network management system to manage and configure a network of switches, the wide area network management system separate from the local area network management system; and

address registration information to be appended to a message sent between a router of the network of routers and a switch of the network of switches over a connection between the router and the switch, wherein ~~either~~ the local area network management system ~~or the wide area network management system~~ uses the address registration information in mapping ~~the network of routers and~~ the network of switches by accessing ~~each router in the network of routers and~~ each switch in the network of switches, wherein the mapping by the local area network management system of the network of switches comprises:

acquiring the address registration information from the router when the message is received at the router from the switch;

accessing a management information base (MIB) associated with the switch using the address registration information;

accessing ~~the MIB~~ other MIBs, each of the other MIBs associated with one of other switches of the network of switches using the MIB associated with the switch from which the message is sent; and

building a map of entire switches of the network of switches based upon accessing each of the other switches.

2. (Original) The system of claim 1, wherein the address registration information comprises an interface index.

3. (Previously Presented) The system of claim 2, wherein the interface index comprises a slot number from which the message was sent.

4. (Previously Presented) The system of claim 2, wherein the interface index comprises a port number from which the message was sent.

5. (Original) The system of claim 1, wherein the address registration information comprises an Internet Protocol address.

6. (Previously Presented) The system of claim 1, wherein the address registration information is sent in a data packet, wherein the data packet comprises spare bytes.

7. (Canceled).

8. (Canceled).

9. (Previously Presented) The system of claim 1, wherein the message is an enhanced local management interface message.

10. (Previously Presented) The system of claim 1, wherein the message is sent when the network of switches and the network of routers are first configured.

11. (Previously Presented) The system of claim 1, wherein the message is sent when the network of switches or the network of routers has a change in configuration.

12. (Previously Presented) The system of claim 1, wherein the message is sent at a regular interval.

13. (Canceled).

14. (Previously Presented) The system of claim 1, wherein the local area network management system configures the network of switches.

15. (Canceled).

16. (Canceled).

17. (Currently Amended) A computer-implemented method, comprising:

appending address registration information to a message;

sending the message between a router of a router network and a switch of a switch network, the router network controlled by a local area network management system and the switch network controlled by a wide area network management system separate from the local area network management system; and

mapping, using the address registration information, the router network from [[a]] the wide area network management system ~~controlling the switch network~~, wherein the mapping comprises:

acquiring the address registration information from the switch when the message is received at the switch from the router;

accessing a management information base (MIB) associated with the router using the address registration information;

accessing ~~the MIB~~ other MIBs, each of the other MIBs associated with one of other routers of the router network using the MIB associated with the router from which the message is sent; and

building a map of entire routers of the router network based upon accessing each of the other routers.

18. (Canceled).

19. (Previously Presented) The method of claim 17, further comprising configuring the router network using the wide area network management system.

20. (Canceled).

21. (Canceled).

22. (Original) The method of claim 17, wherein the address registration information comprises an Internet Protocol address.

23. (Original) The method of claim 17, wherein the address registration information comprises an interface network.

24. (Previously Presented) The method of claim 23, wherein the interface index comprises a slot number from which the message was sent.

25. (Previously Presented) The method of claim 23, wherein the interface index comprises a port number from which the message was sent.

26. (Previously Presented) The method of claim 17, wherein the address registration information is sent in a data packet, wherein the data packet comprises spare bytes.

27. (Canceled).

28. (Canceled).

29. (Previously Presented) The method of claim 17, wherein the message is an enhanced local management interface message.

30. (Previously Presented) The method of claim 17, wherein the message is sent when the network of switches and the network of routers are first configured.

31. (Previously Presented) The method of claim 17, wherein the message is sent when the network of switches or the network of routers has a change in configuration.

32. (Previously Presented) The method of claim 17, wherein the message is sent at a regular interval.

33. (Currently Amended) A machine-readable tangible storage medium tangibly embodying a sequence of instructions executable by the machine to perform operations comprising:

appending address registration information to a message;

sending the message between a router of a router network and a switch of a switch network, the router network controlled by a local area network management system and the switch network controlled by a wide area network management system separate from the local area network management system; and

mapping, using the address registration information, the router network at [[a]] the wide area network management system ~~controlling the switch network~~, wherein the mapping comprises:

acquiring the address registration information from the switch when the message is received at the switch from the router;

accessing a management information base (MIB) associated with the router using the address registration information;

accessing ~~the MIB~~ other MIBs, each of the other MIBs associated with one of other routers of the router network using the MIB associated with the router from which the message is sent; and

building a map of entire routers of the router network based upon accessing each of the other routers.

34. (Canceled).

35. (Previously Presented) The machine-readable tangible storage medium of claim 33, further comprising configuring the router network using the wide area network management system.

36. (Canceled).

37. (Canceled).

38. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the address registration information comprises an Internet Protocol address.

39. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the address registration information comprises an interface index.

40. (Previously Presented) The machine-readable tangible storage medium of claim 39, wherein the interface index comprises a slot number from which the message was sent.

41. (Previously Presented) The machine-readable tangible storage medium of claim 39, wherein the interface index comprises a port number from which the message was sent.

42. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the address registration information is sent in a data packet, wherein the data packet comprises spare bytes.

43. (Canceled).

44. (Canceled).

45. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the message is an enhanced local management interface message.

46. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the message is sent when the network of switches and the network of routers are first configured.

47. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the message is sent when the network of switches or the network of routers has a change in configuration.

48. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the message is sent at a regular interval.

49. (Currently Amended) A system, comprising:

memory to store address registration information;

a means for appending the address registration information to a message;

a means for sending the message between a router of a router network and a switch of a switch network, the router network controlled by a local area network management system and the switch network controlled by a wide area network management system separate from the local area network management system; and

a means for mapping, using the address registration information, the switch network at [[a]] the local area network management system ~~controlling the router network~~, wherein, the mapping comprises:

acquiring the address registration information from the router when the message is received at the router from the switch;

accessing a management information base (MIB) associated with the switch using the address registration information;

accessing ~~the MIB~~ other MIBs, each of the other MIBs associated with one of other switches of the network of switches using the MIB associated with the switch from which the message is sent; and

building a map of entire switches of the network of switches based upon accessing each of the other switches.

50. (Original) The system of claim 49, further comprising a means for use the address registration information to map the router network from a wide area network management system controlling the switch network.

51. (Canceled).

52. (Canceled).

53. (Previously Presented) The system of claim 49, further comprising a means for configuring the switch network using the local area network management system.

54. (Original) The system of claim 49, wherein the address registration information comprises an Internet Protocol address.

55. (Original) The system of claim 49, wherein the address registration information comprises an interface index.

56. (Previously Presented) The system of claim 55, wherein the interface index comprises a slot number from which the message was sent.

57. (Previously Presented) The system of claim 55, wherein the interface index comprises a port number from which the message was sent.

58. (Previously Presented) The system of claim 49, wherein the address registration information is sent in a data packet, wherein the data packet comprises spare bytes.

59. (Canceled).

60. (Canceled).

61. (Previously Presented) The system of claim 49, wherein the message is an enhanced local management interface message.

62. (Previously Presented) The system of claim 49, wherein the message is sent when the network of switches and the network of routers are first configured.

63. (Previously Presented) The system of claim 49, wherein the message is sent when the network of switches or the network of routers has a change in configuration.

64. (Previously Presented) The system of claim 49, wherein the message is sent at a regular interval.

65-80. (Canceled)

81. (Currently Amended) A computer-implemented method, comprising:

appending address registration information to a message;

sending the message between a router of a router network and a switch of a switch network, the router network controlled by a local area network management system and the switch network controlled by a wide area network management system separate from the local area network management system;

mapping, using the address registration information, the router network from [[a]] the wide area network management system ~~controlling the switch network~~ when the message is received at the switch from the router, wherein the mapping the router network from the wide area network management system comprises:

acquiring the address registration information from the switch;

accessing a management information base (MIB) associated with the router using the address registration information;

accessing other MIBs, each of the other MIBs associated with one of other routers of the router network using the MIB associated with the router from which the message is sent; and

building a map of entire routers of the router network based upon accessing each of the other routers;

configuring the router network using the wide area network management system when the map of entire routers of the router network is built from the wide area network management system;

mapping, using the address registration information, the switch network at [[a]] the local area network management system ~~controlling the router network~~ when the message is received at the router from the switch, wherein the mapping the switch network from [[a]] the local area network management system comprises:

acquiring the address registration information from the router ~~when the message is received at the router from the switch~~;

accessing a management information base (MIB) associated with the switch using the address registration information;

accessing ~~the MIB~~ other MIBs each associated with one of other switches of the switch network using the MIB associated with the switch from which the message is sent; and

building a map of entire switches of the switch network based upon accessing each of the other switches; and

configuring the switch network using the local area network management system when the map of entire switches of the switch network is built from the local area network management system .

82. (Currently Amended) A system, comprising:

a local area network management system configured to control a router network, the local network management system ~~operable to~~ capable of:

acquiring ~~acquire~~ address registration information from a router of the router network, the address registration information included in a message sent to the router from a switch of a switch network, the switch network controlled by a wide area network management system separate from the local area network management system ~~operatively coupled to the router network~~;

accessing ~~access~~ a management information base (MIB) associated with the switch using the address registration information;

accessing ~~access the MIB~~ other MIBs, each of the other MIBs associated with one of other switches of the switch network using the MIB associated with the switch from which the message is sent; and

building ~~build~~ a map of entire switches of the switch network based upon accessing each of the other switches.

83. (Currently Amended) A computer-implemented method at a local area network management system configured to control a router network, comprising:

acquiring address registration information from a router of the router network, the address registration information included in a message sent to the router from a switch of a switch network, the switch network controlled by a wide area network management system separate from the local area network management system ~~operatively coupled to the router network~~;

accessing a management information base (MIB) associated with the switch using the address registration information;

accessing ~~the MIB~~ other MIBs, each of the other MIBs associated with one of other switches of the switch network using the MIB associated with the switch from which the message is sent; and

building a map of entire switches of the switch network based upon accessing each of the other switches.

84. (New) The system of claim 1, wherein the switch is to send the message to the router before the switch receives a request for the address registration information from the router.

85. (New) The method of claim 17, wherein the router is to send the message to the switch before the router receives a request for the address registration information from the switch.